



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,142	01/29/2002	John Lockwood	0023-0080	7384

44987 7590 05/04/2005

HARRITY & SNYDER, LLP
11240 WAPLES MILL ROAD
SUITE 300
FAIRFAX, VA 22030

EXAMINER

DEBERADINIS, ROBERT L

ART UNIT	PAPER NUMBER
----------	--------------

2836

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

57

Office Action Summary

Application No.

10/058,142

Applicant(s)

LOCKWOOD ET AL.

Examiner

Robert DeBeradinis

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/18/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

In response to telephone interview on 4/18/05 and Applicant's after final remarks filed on 2/18/05 the finality of the last office action is withdrawn. The claims are not allowable for the following reasons.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6, 13-15, 22, 25, 26, 32, 46 are rejected under 35 U.S.C. 102(b) as being anticipated by KEEL 5,923,709.

Regarding claims 1, 13, 25, 46.

KEEL discloses a cable comprising:

a first connector;

a second conductor comprising:

a signal processing element configured to process signals transmitted between the first and second connectors; and

a cable conductor connected at a first end to the first connector and at a second end to the second connector, the cable conductor being configured to extend shielding from a device connected to one of the first connector or the

Art Unit: 2836

second connector to another one of the first connector or the second connector
(intelligent cable assembly 10).

Regarding claims 2, 3, 14, 15, 26.

KEEL discloses the signal conductor of claim 1.

KEEL does not disclose wherein the first connector connects to a patch panel
and the second connector connects to a network device.

Intended use does not differentiate the claimed apparatus from prior art. Ex parte
Masham, 2 USPQ2d 1647 (1987).

Regarding claims 6, 22, 32.

KEEL' S intelligent cable assemble discloses shielding the electronic
components therein from electromagnetic interference (column 4, lines 9-11).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5, 7-10, 16-21, 27-29, 30, 31, 47 are rejected under 35 U.S.C. 103(a)
as being unpatentable over KEEL 5,923,709 in view of BELOPOLSKY US
2003/0096537.

Regarding claims 4, 16, 27, 47.

Art Unit: 2836

KEEL discloses the signal conductor of claim 1.

KEEL does not disclose wherein the signal processing element comprises:

A pulse transformer configured to translate the signals between balanced signals and single ended signals.

BELOPOLSKY discloses pulse transformers configured to translate the signals between balanced signals and single ended signals.

It would have been obvious to one having ordinary skill in the art at the time of this invention to modify the intelligent cable assembly disclosed by KEEL to include a pulse transformer. The motivation would be to isolate input ground lines from output ground lines.

Regarding claims 5, 17, 20, 28.

BELOPOLSKY discloses a common mode choke (see figure 5 and paragraph 23).

Regarding claims 7, 8, 9, 18, 19, 21, 29, 30, 31.

KEEL discloses the signal conductor of claim 1.

KEEL does not disclose wherein the cable conductor comprises:

A receive cable configuration to transmit signals from the second connector to the first connector.

BEOPOLSKY discloses transmit and receive cable configurations (figure 5).

It would have been obvious to one having ordinary skill in the art at the time of this invention to modify the intelligent cable assembly to have transmit and receive

Art Unit: 2836

capabilities. The motivation would be to transmit and receive information from the modem.

Regarding claim 10.

KEEL in view of BEOPOLSKY disclose the signal conductor of claim 9.

BEOPOLSKY discloses common mode choke is used to reduce noise on lines (paragraph 23).

Claims 11, 12, 23, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over KEEL 5,923,709 in view of CRANE 5,661,631.

Regarding claims 11, 12, 23, 24.

KEEL discloses the signal conductor of claim 1.

KEEL does not disclose very high density cable interconnect or a telephone company connector.

CRANE discloses a very high density cable that provides an electrical path between DTU 100 and PSU 200 (column 5, lines 30-36) and a phone connector 250f (column 11, lines 62-67).

It would have been obvious to one having ordinary skill in the art at the time of this invention to provide a very high density cable with the intelligent cable assemble. The motivation would be to connect a high density of electrical paths between two electronic devices.

Art Unit: 2836

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over KEEL 5,923,709 in view of AEKINS 6,057,743.

Regarding claim 33.

KEEL discloses an intelligent cable assembly having a first connector being configured to connect to a second connector.

KEEL is silent as to a plurality of first connectors, plurality of second connectors and a plurality of groups of connectors.

AEKINS discloses distribution noise reduction circuits in telecommunication system connector arranged in ordered arrays and connected by a circuit having a plurality of conductive paths (abstract).

It would have been obvious to one having ordinary skill in the art at the time of this invention to modify the intelligent cable assemble to have a plurality of first connectors and a plurality of second connectors arranged in groups. The motivation would be to interconnect devises having a plurality of interconnecting signal lines.

Claims 34-37, 38-45, 48, 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over KEEL 5,923,709 in view of AEKINS 6,057,743 in further view of BELOPOLSKY US 2003/0096537.

Regarding claims 34, 37, 38, 39, 40, 43, 44, 48, 49.

KEEL in view of AEKINS disclose the patch panel of claim 33.

KEEL in view of AEKINS does not disclose pulse transformer configuration.

Art Unit: 2836

BELOPOLSKY discloses pulse transformer configuration to transmit and receive balanced signals.

It would have been obvious to one having ordinary skill in the art at the time of this invention to modify the plurality of groups of interconnecting cables with a plurality of pulse transformers. The motivation would be to transform single line interconnecting cables to a balanced line network.

Regarding claims 35, 39, 45.

BELOPOLSKY discloses a common mode choke (see figure 5 and paragraph 23).

Regarding claims 36, 42.

KEEL' S intelligent cable assemble discloses shielding the electronic components therein from electromagnetic interference (column 4, lines 9-11).

Regarding claim 41.

Intended use does not differentiate the claimed apparatus from prior art. Ex parte Masham, 2 USPQ2d 1647 (1987).

Response to Arguments

Applicant's argument with respect to KEEL et al. wherein KEEL et al. does not disclose or suggest a cable conductor connected at a first end to a first connector and at a second connector and configured to extend shielding. KEEL et al discloses assembly (10) connected at a first end to a first connector (12) and at a second connector (14) and configured to extend shielding. Shielding between connector connections is

Art Unit: 2836

inherent to a shielded cable assemble. KEEL'S assemble is a shielded assemble.

BLOCK 4,554,608, cited as a reference but not relied upon for the rejection, teaches a shielded connector assemble having many configurations extending shielding from a device connected to one of the first connector or the second connector to another one of the first connector or second connector. LAKE 6,183,289 and PIMETA 6,304,934 also teach similar cable connector assemblies.

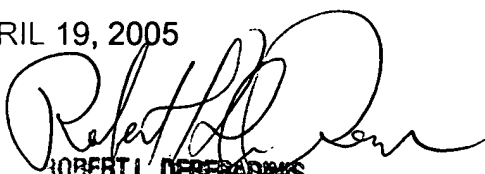
Applicant's argument with respect to Aekins not teaching a patch panel that includes a plurality of connectors and a plurality of groups of second connectors. Patch panels are obviously well known in the art, for example, MENTLIKOWSKI 4,305,630 cited as a reference but not relied upon for the rejection, discloses patch panel for use with analog computer, the cable terminations extend through the panel into electrical connection with terminals permanently located in the computer.

Any inquiry concerning this communication should be directed to Robert L. DeBeradinis whose number is (571) 272-2049. The Examiner can normally be reached Monday-Friday from 8:30 am to 5:00 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Brian Sircus, can be reached on (571) 272-2058. The Fax phone number for this Group is (703) 872-9306.

RLD

APRIL 19, 2005


ROBERT L. DEBERADINIS
PRIMARY EXAMINER